

**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**

TIP PROJECT: U-5935

CONTRACT: C203975

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WILSON COUNTY

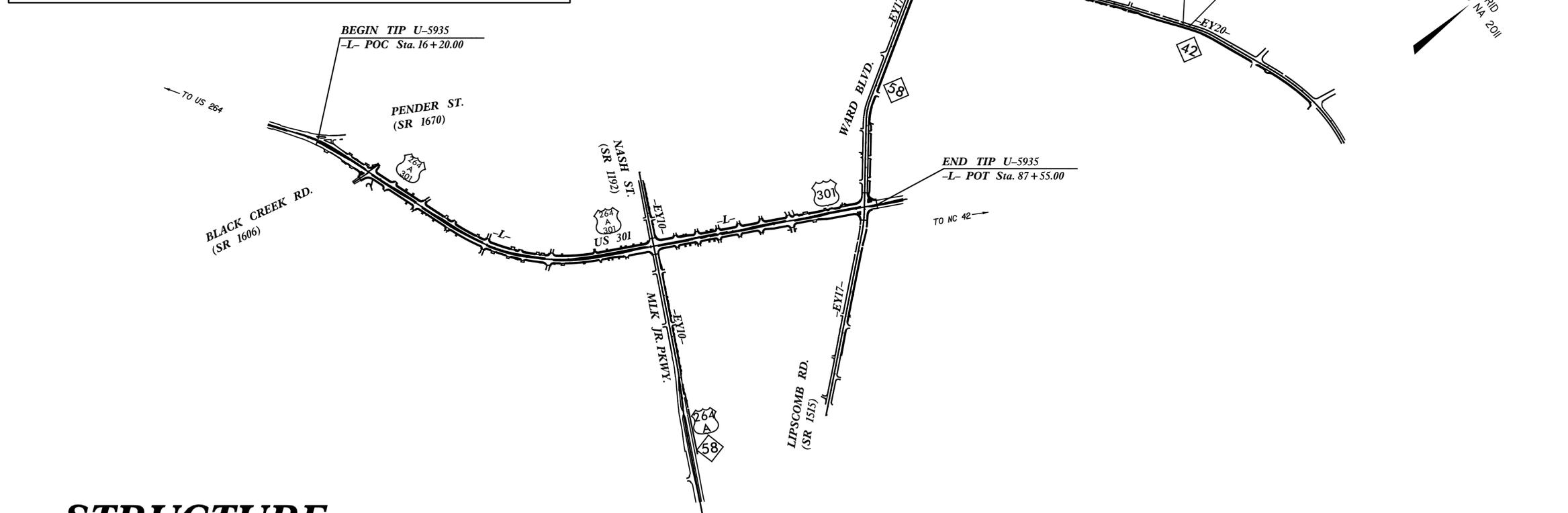
**LOCATION: US 301 FROM BLACK CREEK ROAD (SR 1606)
TO LIPSCOMB ROAD (SR 1515)**

TYPE OF WORK: GRADING, PAVING, DRAINAGE, SIGNALS, AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5935		
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
44795.1.2		PE	
44795.2.1	STBG-0301(041)	R/W	
44795.3.1	STBG-0301(041)	CONST.	



VICINITY MAP



STRUCTURE



DESIGN DATA

ADT 2016 =	18,200
ADT 2041 =	22,800
K =	9%
D =	55%
T =	11%*
V =	50 MPH
* TTST = 6% + DUAL 5%	
FUNC CLASS =	ARTERIAL
STATEWIDE TIER	

PROJECT LENGTH

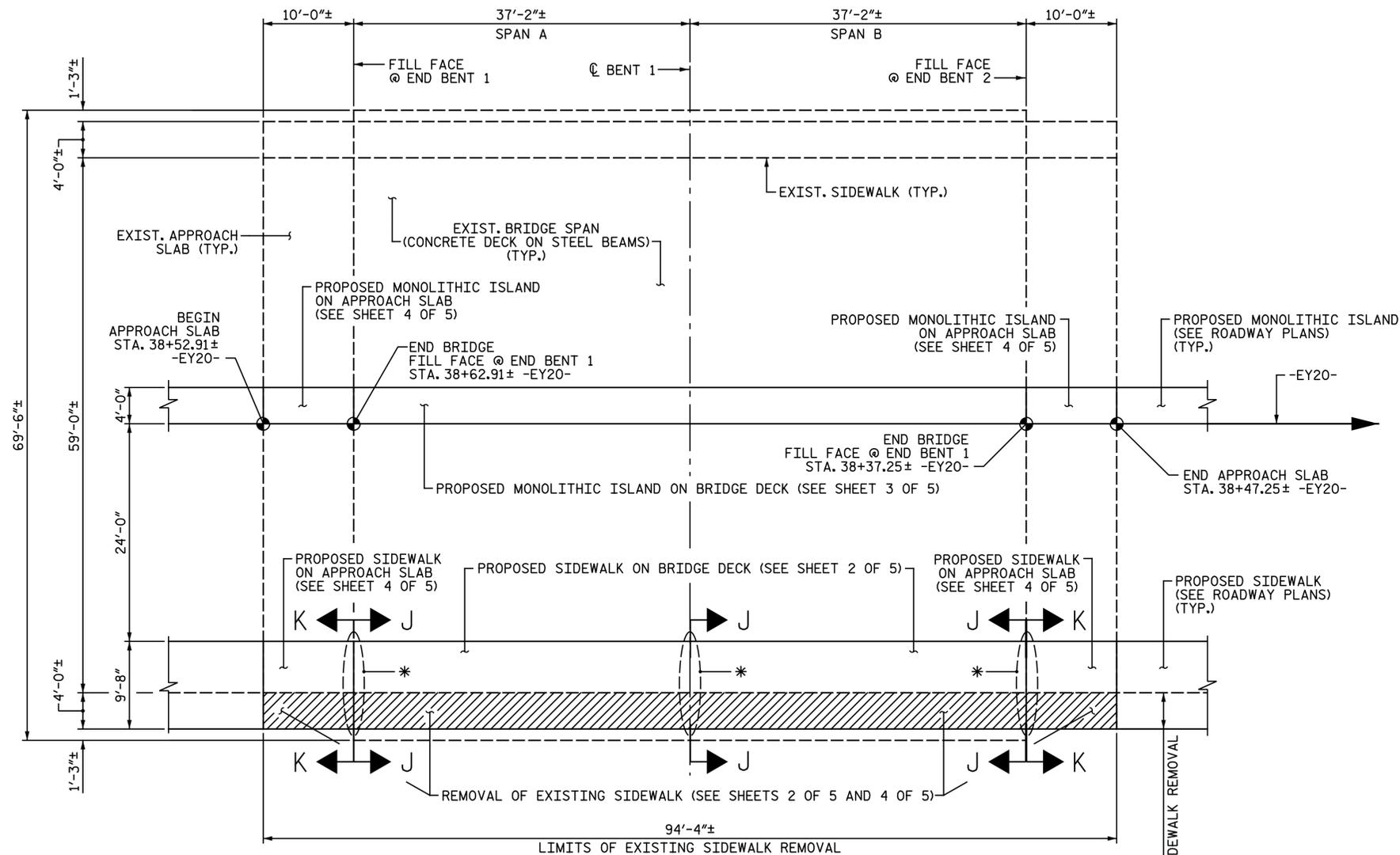
LENGTH ROADWAY TIP PROJECT U-5935 =	1.351 MILES
TOTAL LENGTH TIP PROJECT U-5935 =	1.351 MILES

Prepared In the Office of:
Michael Baker Engineering, Inc.
8000 Regency Pkwy
Suite 600
Cary, NC 27518
NC License: F-1084

2012 STANDARD SPECIFICATIONS	
LETTING DATE: SEPTEMBER 19, 2017	DOMENIC A. COLETTI, PE PROJECT DESIGN ENGINEER

DIVISION OF HIGHWAYS
STRUCTURES MANAGEMENT UNIT
1000 BIRCH RIDGE DRIVE
RALEIGH, N.C. 27610

TOTAL BILL OF MATERIAL					
	REMOVAL OF EXISTING STRUCTURE @ STA. 39+00.08 -EY20-	CLASS AA CONCRETE	EPOXY COATED REINFORCING STEEL	FOAM JOINT SEALS	ASBESTOS ASSESSMENT
	LUMP SUM	CU. YDS.	LBS.	LUMP SUM	LUMP SUM
REINFORCED CONCRETE DECK SLAB		22.8	1190		
BRIDGE APPROACH SLAB		6.1	313		
TOTAL	LUMP SUM	28.9	1503	LUMP SUM	LUMP SUM



PLAN OF SUPERSTRUCTURE MODIFICATIONS

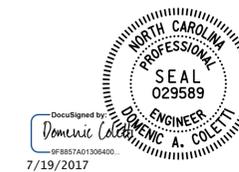
* PROPOSED FOAM JOINT SEAL IN SIDEWALK (SEE SHEET 5 OF 5)

NOTES:

- PAY ITEMS LISTED UNDER REINFORCED CONCRETE DECK SLAB INCLUDE PAYMENT FOR CONSTRUCTION OF SIDEWALK AND MONOLITHIC ISLAND ON BRIDGE DECK.
- PAY ITEMS LISTED UNDER BRIDGE APPROACH SLABS INCLUDE PAYMENT FOR CONSTRUCTION OF SIDEWALK AND MONOLITHIC ISLAND ON APPROACH SLABS.
- FOR THERMAL SPRAYED COATINGS (METALLIZATION), SEE SPECIAL PROVISIONS.
- FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.
- PAYMENT FOR SIDEWALK JOINT COVER PLATES IS INCLUDED IN THE PAY ITEM FOR FOAM JOINT SEALS.
- FOR FORMWORK AND FALSEWORK, SEE SPECIAL PROVISIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
- FOR REMOVAL OF EXISTING STRUCTURE AT STA. 39+00.08 -EY20-, SEE SPECIAL PROVISIONS.
- FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.
- COORDINATE LOCATIONS AND LIMITS OF PROPOSED MONOLITHIC ISLAND AND SIDEWALK ON APPROACH SLABS WITH ASSOCIATED ROADWAY CONSTRUCTION. SEE ROADWAY PLANS.
- ANY DAMAGE TO THE EXISTING DECK AND 3-BAR METAL RAIL DURING THE REMOVAL OF EXISTING SIDEWALK CONCRETE WILL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DEPARTMENT.

PROJECT NO. U-5935
WILSON COUNTY
 STATION: 39+00.08 -EY20-

SHEET 1 OF 5 BRIDGE NO. 60



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUPERSTRUCTURE MODIFICATIONS
 GENERAL PLAN AND
 BILL OF MATERIALS**

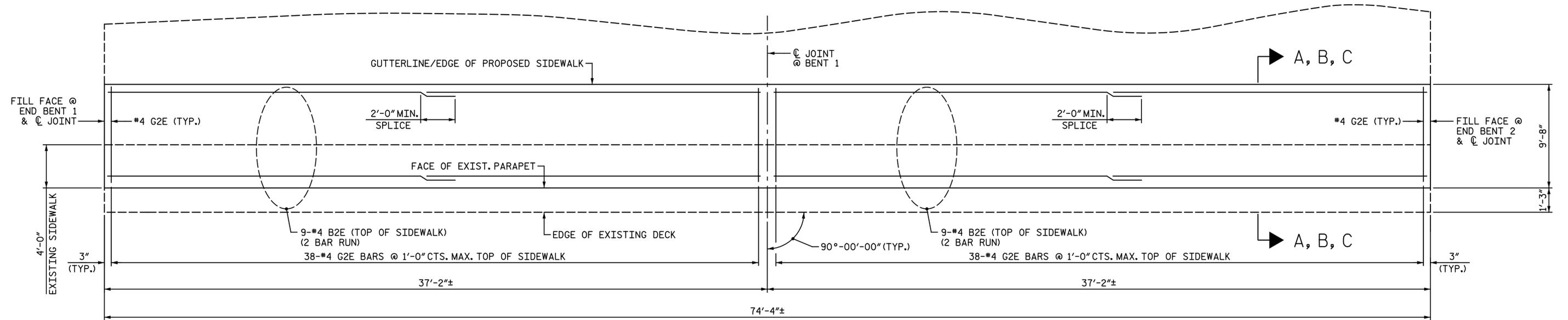
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	SI-1
1			3			TOTAL SHEETS
2			4			5

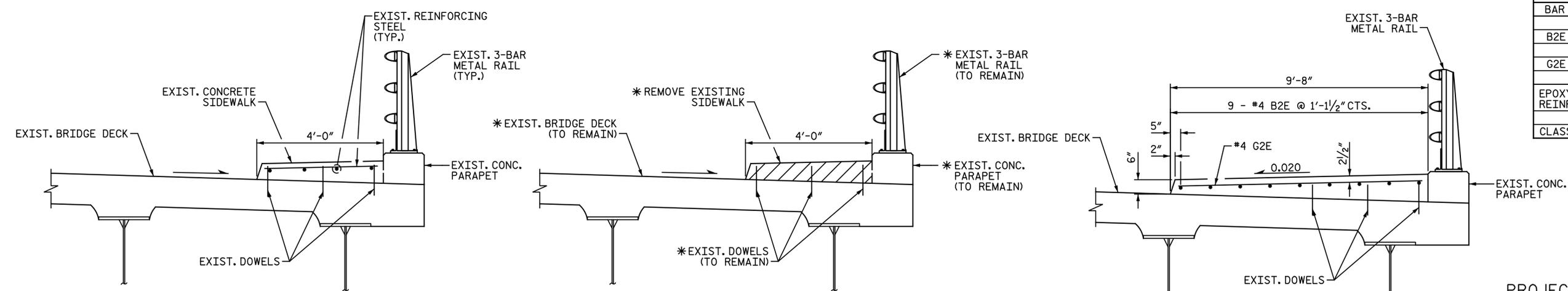
DRAWN BY : N. B. SPEAKS DATE : 5-19-17
 CHECKED BY : D. A. COLETTI DATE : 5-19-17

Michael Baker INTERNATIONAL
 Michael Baker Engineering
 8000 Regency Parkway, Suite 600
 Cary, North Carolina 27518
 NC License No. : F-1084

NOTES:
 ALL REINFORCING STEEL IN SIDEWALKS SHALL BE EPOXY COATED.
 GROOVED CONTRACTION JOINTS 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE SIDEWALK IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINTS SHALL BE LOCATED AT EACH CENTERLINE RAIL POST LOCATION.



PLAN OF PROPOSED SIDEWALK



SECTION A-A
EXISTING SIDEWALK

SECTION B-B
EXISTING SIDEWALK REMOVAL

SECTION C-C
PROPOSED SIDEWALK

* REMOVE EXISTING SIDEWALK CONCRETE AND HORIZONTAL REINFORCING TO THE LIMITS SHOWN. RETAIN AND AVOID DAMAGE TO EXISTING VERTICAL DOWELS CONNECTING SIDEWALK TO DECK. AVOID DAMAGE TO EXISTING DECK AND EXISTING 3-BAR METAL RAIL AND ITS EXISTING CONCRETE PARAPET.

BILL OF MATERIAL					
FOR PROPOSED SIDEWALK ON BRIDGE DECK (QUANTITIES SHOWN ARE FOR BOTH SPANS)					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B2E	36	#4	STR.	19'-6"	469
G2E	76	#4	STR.	9'-2"	465
EPOXY COATED REINFORCING STEEL				LBS.	934
CLASS AA CONCRETE				C. Y.	18.6

PROJECT NO. U-5935
WILSON COUNTY
 STATION: 39+00.08 -EY20-

SHEET 2 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SUPERSTRUCTURE MODIFICATIONS SIDEWALK ON BRIDGE DECK

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Michael Baker INTERNATIONAL
 Michael Baker Engineering
 8000 Regency Parkway, Suite 600
 Cary, North Carolina 27518
 NC License No.: F-1084

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	SI-2
1			3			TOTAL SHEETS
2			4			5

DRAWN BY : N. B. SPEAKS DATE : 5-16-17
 CHECKED BY : D. A. COLETTI DATE : 5-18-17

NOTES:

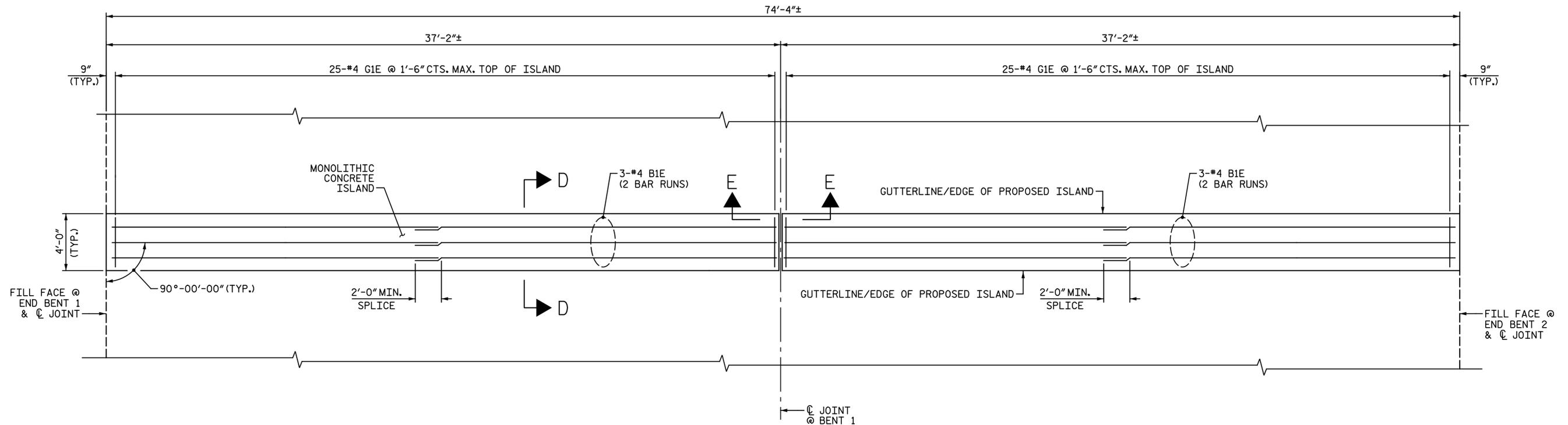
GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH SHALL BE TOOLED IN ALL EXPOSED FACES OF THE MONOLITHIC ISLAND IN ACCORDANCE WITH ARTICLE 825-10 (B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINTS SHALL BE LOCATED AT A SPACING OF 8 FT. TO 10 FT. BETWEEN FILL FACE AT END BENT 1 TO FILL FACE AT END BENT 2 AND OVER THE INTERIOR BENTS. NO CONTRACTION JOINTS WILL BE REQUIRED FOR SEGMENTS LESS THAN 10 FEET IN LENGTH.

ALL REINFORCING STEEL IN MONOLITHIC ISLAND SHALL BE EPOXY COATED.

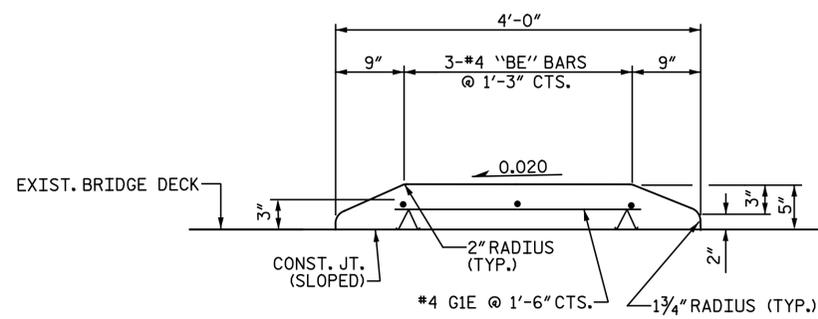
BILL OF MATERIAL

FOR PROPOSED MONOLITHIC ISLAND ON BRIDGE DECK (QUANTITIES SHOWN ARE FOR BOTH SPANS)

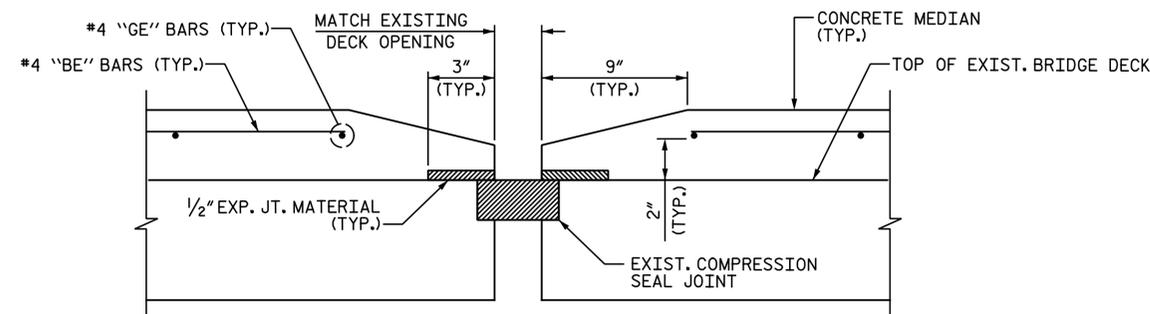
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1E	12	#4	STR.	19'-6"	156
G1E	50	#4	STR.	3'-0"	100
EPOXY COATED REINFORCING STEEL				LBS.	256
CLASS AA CONCRETE				C. Y.	4.2



PLAN OF MONOLITHIC CONCRETE ISLAND



SECTION D-D
PROPOSED MEDIAN



SECTION E-E
DETAILS AT EXPANSION JOINT

PROJECT NO. U-5935

WILSON COUNTY

STATION: 39+00.08 -EY20-

SHEET 3 OF 5



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
MODIFICATIONS
MONOLITHIC CONCRETE
ISLAND ON BRIDGE DECK

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	SI-3
1			3			TOTAL SHEETS
2			4			5

DRAWN BY : N. B. SPEAKS DATE : 5-17-17
CHECKED BY : D. A. COLETTI DATE : 5-18-17

Michael Baker INTERNATIONAL
Michael Baker Engineering
8000 Regency Parkway, Suite 600
Cary, North Carolina 27518
NC License No. : F-1084

NOTES:

ALL REINFORCING STEEL IN SIDEWALKS AND MONOLITHIC ISLAND SHALL BE EPOXY COATED.

BILL OF MATERIAL

FOR PROPOSED SIDEWALK ON APPROACH SLABS (QUANTITIES SHOWN ARE FOR BOTH APPROACH SLABS)

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B4E	18	#4	STR.	9'-8"	116
G4E	22	#4	STR.	9'-2"	135

EPOXY COATED REINFORCING STEEL LBS. 251

CLASS AA CONCRETE C. Y. 5.0

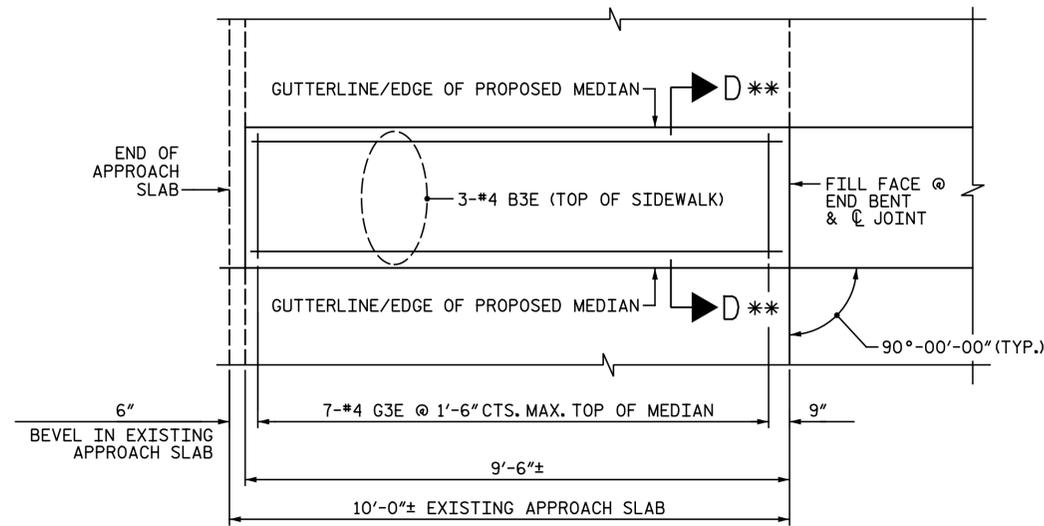
BILL OF MATERIAL

FOR PROPOSED MONOLITHIC ISLAND ON APPROACH SLABS (QUANTITIES SHOWN ARE FOR BOTH APPROACH SLABS)

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B3E	6	#4	STR.	8'-7"	34
G3E	14	#4	STR.	3'-0"	28

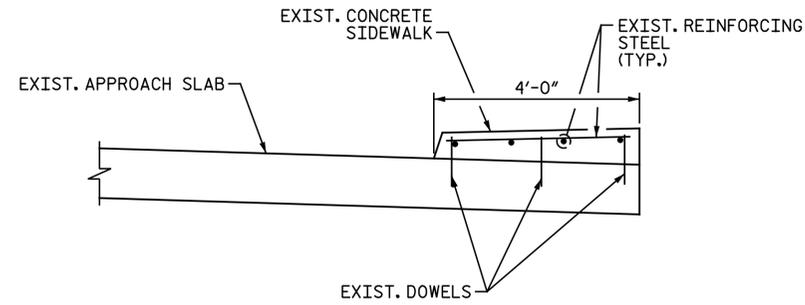
EPOXY COATED REINFORCING STEEL LBS. 62

CLASS AA CONCRETE C. Y. 1.1

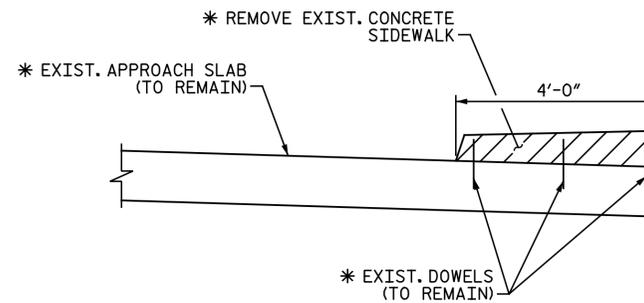


PLAN OF PROPOSED MONOLITHIC ISLAND

(END BENT 1 APPROACH SLAB SHOWN, END BENT 2 APPROACH SLAB SYMMETRIC ABOUT C BENT 1)
 ** FOR SECTION D-D (SIMILAR), SEE SHEET 3 OF 5.

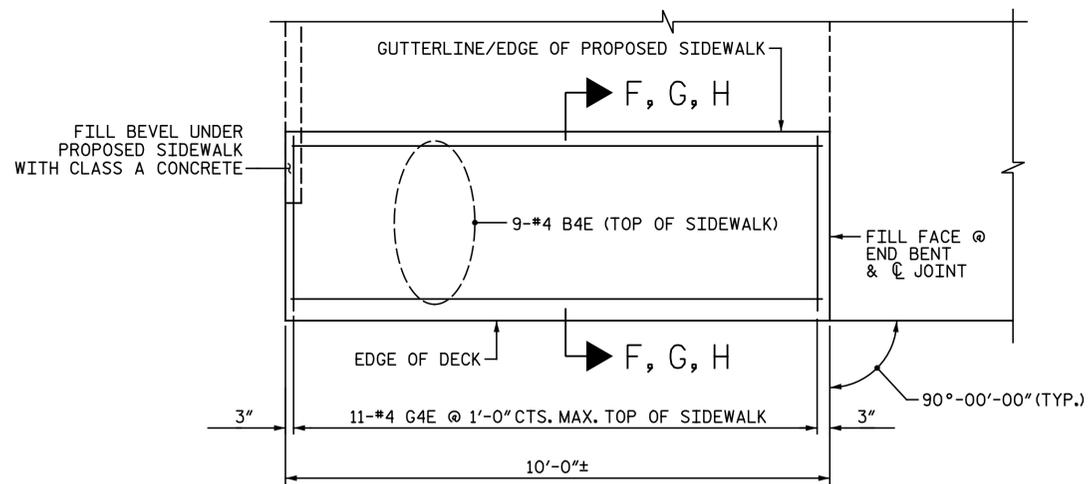


**SECTION F-F
EXISTING SIDEWALK**



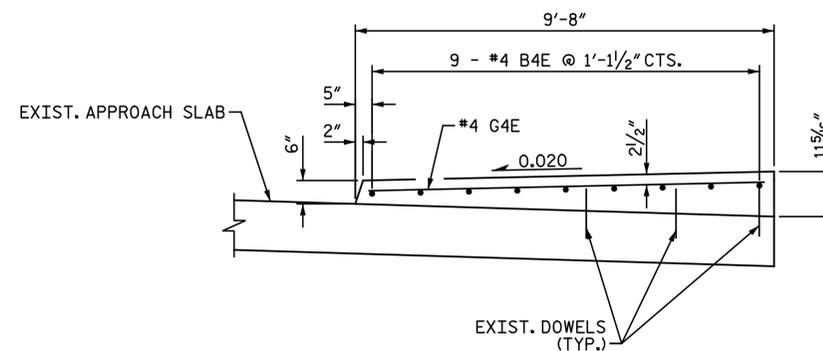
**SECTION G-G
EXISTING SIDEWALK REMOVAL**

* REMOVE EXISTING SIDEWALK CONCRETE AND HORIZONTAL REINFORCING TO THE LIMITS SHOWN. RETAIN AND AVOID DAMAGE TO EXISTING VERTICAL DOWELS CONNECTING SIDEWALK TO APPROACH SLAB. AVOID DAMAGE TO EXISTING APPROACH SLAB.



PLAN OF PROPOSED SIDEWALK

(END BENT 1 APPROACH SLAB SHOWN, END BENT 2 APPROACH SLAB SYMMETRIC ABOUT C BENT 1)



**SECTION H-H
PROPOSED SIDEWALK**

PROJECT NO. U-5935
 WILSON COUNTY
 STATION: 39+00.08 -EY20-

SHEET 4 OF 5



DocuSigned by:
 Dominic A. Coletti
 9F8857A01306400
 7/19/2017

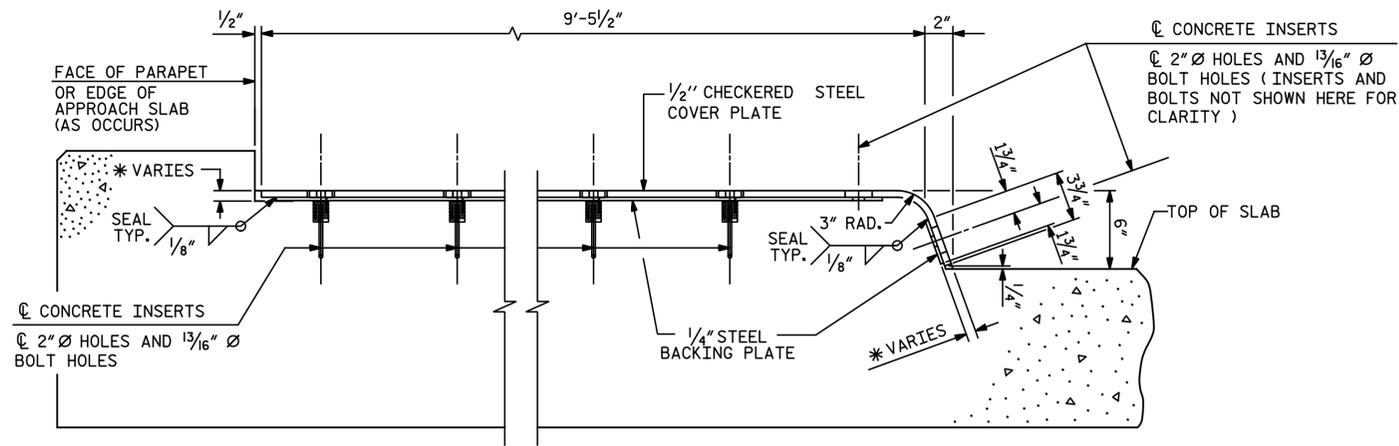
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 MODIFICATIONS
 SIDEWALK AND
 MONOLITHIC ISLAND
 ON APPROACH SLAB

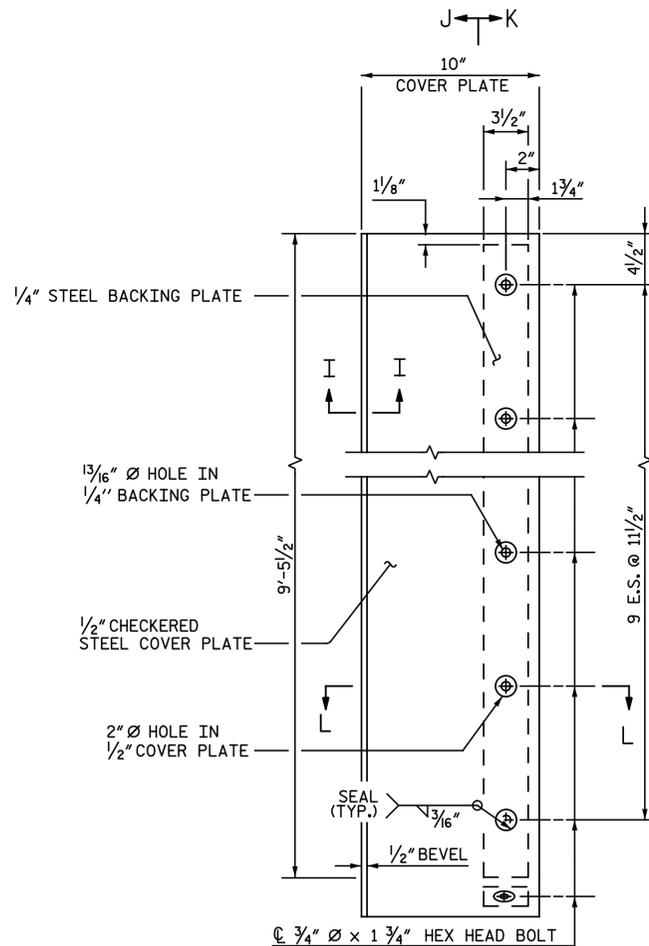
DRAWN BY : N. B. SPEAKS DATE : 5-16-17
 CHECKED BY : D. A. COLETTI DATE : 5-18-17

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	SI-4
1			3			TOTAL SHEETS
2			4			5



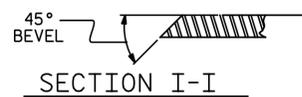
END VIEW
(NORMAL TO SIDEWALK)

* CONCRETE RECESS DIMENSIONS:
 $\frac{13}{16}$ " FOR THE SIDE OF THE JOINT HAVING THE $\frac{1}{2}$ " COVER PLATE WITH A $\frac{1}{4}$ " BACKING PLATE.
 $\frac{9}{16}$ " FOR THE SIDE OF THE JOINT HAVING ONLY THE $\frac{1}{2}$ " COVER PLATE.

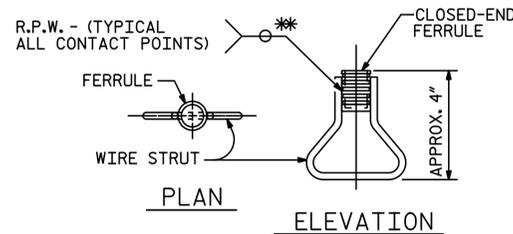


PLAN VIEW

COVER PLATE DETAILS

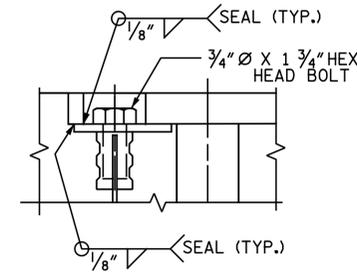


SECTION I-I

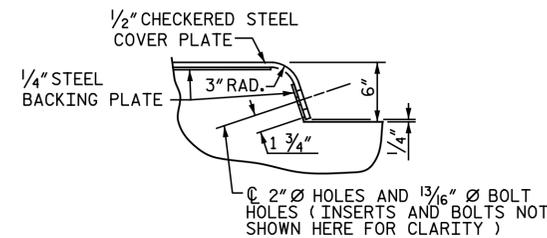


CONCRETE INSERT

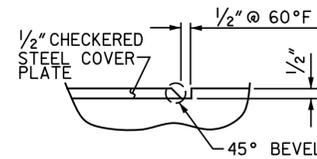
* EACH WELDED ATTACHMENT OF WIRE TO FERRULE SHALL DEVELOP THE TENSILE STRENGTH OF THE WIRE.



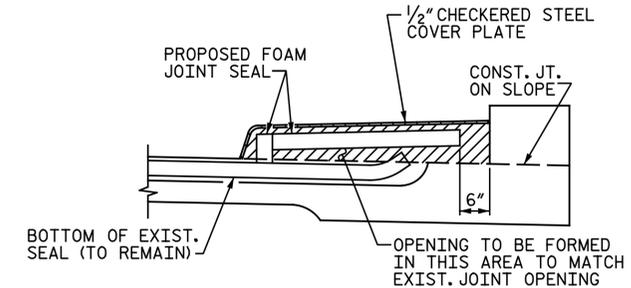
DETAIL "A"



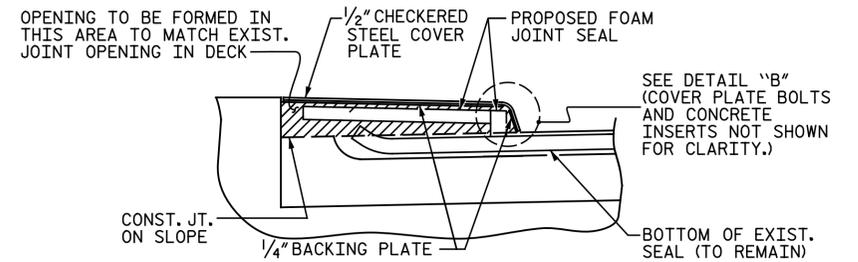
DETAIL "B"



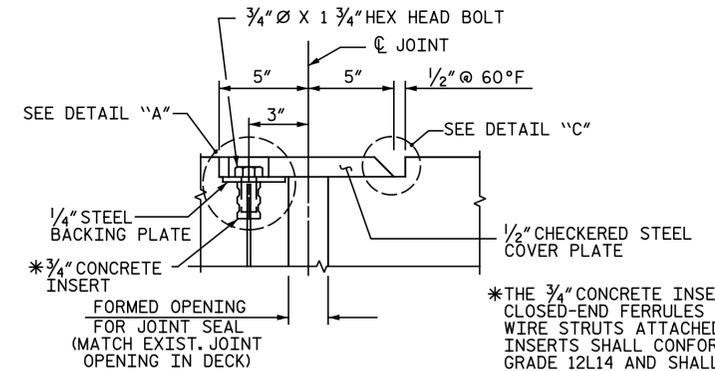
DETAIL "C"



SECTION J-J



SECTION K-K



SECTION L-L

JOINT SEAL DETAILS

NOTES

THE STEEL PLATES SHALL CONFORM TO AASHTO M270 GRADE 36 OR APPROVED EQUAL. AFTER FABRICATION, THE PLATES SHALL BE COMMERCIALY BLAST CLEANED AND EITHER COATED WITH A MINIMUM THICKNESS OF 4 MILS (DRY) OF ZINC-RICH PAINT, GALVANIZED OR METALLIZED TO A MINIMUM THICKNESS OF 6 MILS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. FOR THERMAL SPRAYED COATINGS (METALLIZATION), SEE SPECIAL PROVISIONS.

THE $\frac{3}{4}$ " DIAMETER HEX HEAD BOLTS SHALL CONFORM TO ASTM F593 ALLOY 304 STAINLESS STEEL.

NO SEPARATE PAYMENT WILL BE MADE FOR FURNISHING AND INSTALLING THE COVER PLATE. THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR "FOAM JOINT SEALS".

PROJECT NO. U-5935
WILSON COUNTY
 STATION: 39+00.08 -EY20-

SHEET 5 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 MODIFICATIONS
 FOAM JOINT
 SEAL DETAILS
 FOR SIDEWALK

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

Michael Baker INTERNATIONAL		Michael Baker Engineering 8000 Regency Parkway, Suite 600 Cary, North Carolina 27518 NC License No.: F-1084		REVISIONS		SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	SI-5
1			3			TOTAL SHEETS
2			4			5

DRAWN BY : N. B. SPEAKS DATE : 5-18-17
 CHECKED BY : D. A. COLETTI DATE : 5-18-17

STANDARD NOTES

DESIGN DATA:

SPECIFICATIONS	-----	A.A.S.H.T.O. (CURRENT)
LIVE LOAD	-----	SEE PLANS
IMPACT ALLOWANCE	-----	SEE A.A.S.H.T.O.
STRESS IN EXTREME FIBER OF		
STRUCTURAL STEEL - AASHTO M270 GRADE 36	-	20,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50W	-	27,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50	-	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION		
GRADE 60	--	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	-----	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	-----	SEE A.A.S.H.T.O.
STRUCTURAL TIMBER - TREATED OR		
UNTREATED - EXTREME FIBER STRESS	-----	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	-----	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	-----	30 LBS. PER CU. FT. (MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2012 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N. C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED 3/4" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1-1/2" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A 1/4" FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A 1/4" RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.
ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.
IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.
DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.
WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE 7/8" Ø SHEAR STUDS FOR THE 3/4" Ø STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" Ø STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF 7/8" Ø STUDS ALONG THE BEAM AS SHOWN FOR 3/4" Ø STUDS BASED ON THE RATIO OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" Ø STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0".
EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST 5/16" IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.
WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY 1/16 INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.
METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINIS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.

ENGLISH

JANUARY, 1990

STD. NO. SN